

**Commonwealth of Kentucky**  
**Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by: D. Brian Ballard, P.E.

GENERAL INFORMATION:

Name:	Guardian Automotive Trim
Address:	200 Guardian Avenue Morehead, KY 40531
Date application received:	2/4/2008
SIC Code/SIC description:	3089, Miscellaneous Plastic Metal Finishing
Source ID:	21-205-00042
Agency Interest:	3866
Activity:	APE20070002
Permit:	V-05-019 (Revision 1)

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
<u>X</u> Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input checked="" type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input checked="" type="checkbox"/> Other: 401 KAR 63:020
<input type="checkbox"/> Netted out of PSD/NSR	<input checked="" type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM <sub>10</sub>	3.85	106
SO <sub>2</sub>	0.085	0.281
NO <sub>x</sub>	14.1	46.9
CO	11.7	34.8
VOC	14.7	2,676
Single HAPs		
1,6-Hexamethylene Diisocyanate	0.010	1.73
Acrylonitrile	0.039	0.071
Chromium Compounds	0.0012	0.0012
Cobalt Compounds	0.0025	1.56
Cumene	0.036	0.065
Ethyl Benzene	1.05	216
Formaldehyde	0.0023	0.632
Glycol Ether	0.094	32.0
Hydrazine	0.0008	0.0008
Lead	0.00003	0.0001
Methanol	0.220	145
Methyl Isobutyl Ketone	0.269	53.7
Nickel Compounds	1.79	1.90
Styrene	3.81	6.94
Toluene	0.479	162

EMISSIONS SUMMARY (CONTINUED):

Pollutant	Actual (tpy)	Potential (tpy)
Vinyl Acetate	0.007	1.18
1,3-Butadiene	0.008	0.014
Phenol	0.008	0.014
Xylene	1.17	340
Source wide HAPs	6.80	959

SOURCE DESCRIPTION:

The source manufactures plastic parts for automobiles. Operations at the facility include injection molding of plastic parts, spray coating of plastic parts with solvent based coatings and decorative chrome electroplating of plastic parts. There are twenty-nine (29) injection molding machines at the facility. There are approximately 100 tanks employed in the preparation, plating with copper, nickel, and chrome, and rinsing steps required for the production of automotive trim components. Wet scrubbers are used to control particulate emissions from plating operations. A chemical fume suppressant containing a wetting agent in addition to a wet scrubber is used to control chromium emissions from decorative chrome plating. There are four paint lines at the facility. Permanent total enclosures are used to capture 100 percent of the VOC emissions from the paint lines. The captured emissions are controlled by four (4) regenerative thermal oxidizers.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

Visible emissions from control devices or stacks shall not exceed 20 percent opacity. Particulate matter emissions from control devices or stacks shall not exceed 2.34 pounds per hour (3-hour average). The VOC emissions discharged into the atmosphere from each paint line shall not exceed fifteen (15) percent by weight of the VOCs net input into the affected facility (24-hour average). For each existing general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period. For each existing thermoplastic olefin (TPO) coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period. If the general use or TPO surface coating operations subject to only one of the emission limits specified above account for 90 percent or more of the surface coating activity at the facility (*i.e.*, it is the predominant activity at the facility), then compliance with that emission limitation for all surface coating operations constitutes compliance with the other applicable emission limitation. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health or welfare of humans, animals and plants.

OPERATIONAL FLEXIBILITY:

N/A